

REMARKS

Claims 1-30 remain for reconsideration.

Claim 21 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In response, the preamble has been changed from "Computer software..." to "A machine-accessible medium including instructions that, when executed, cause a machine to:" which is believed to be a proper "*Beauregard*" preamble. As amended, it is respectfully submitted that claim 21 is now clear and definite and it is respectfully requested that this ground of rejection be withdrawn.

Claims 21-24 and 25-30 stand rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. With regard to claims 21-24, it is respectfully submitted that the amended "*Beauregard*" preamble squarely places these claims within the realm of statutory subject matter under Section 101.

With regard to claims 25-30, these claims have been amended to "system" type claims, also within the scope of Section 101.

As amended, it is respectfully requested that the rejections under Section 101 be withdrawn.

The prior art rejections are summarized as follows:

1. Claims 1-4, 10, 12-14, 17-19, and 21 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,625,407 to Biggs;
2. Claims 25-27 and 29-30 have been rejected under 35 U.S.C. 102(e) as being unpatentable over U.S. Patent 6,731,609 to Hirni;
3. Claims 5-8, 11, 15-16, 20, and 22-24 have been rejected under 35 U.S.C. 103(a) in view of Biggs and Hirni;
4. Claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Biggs in view of U.S. Patent 5,566,171 to Levinson;
5. Claim 28 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hirni in view of U.S. Patent 5,859,979 to Tung.

These rejections are respectfully traversed based on the following discussion.

Briefly, embodiments of the present invention are directed to multipoint conferencing. As explained for example with reference to Figure 1A, prior art systems typically use a Multipoint Control Unit (MCU) 104 to coordinate between the various participants in the conference. As shown in Figure 1A, all signaling and connections may be routed through the MCU in a centralized system or, as shown in Figure 1B, in a decentralized system, a

Multipoint Controller (MC) 108 is still used to serve a centralized signaling controller.

Embodiments of the present invention seek to eliminate the use of the MCU 104 and the MC 108. As stated in paragraph [0011] of the disclosure, embodiments of the invention involve a signaling process for setting up a distributed multipoint conference among three or more endpoints without requiring centralized control either for signaling or for mixing media streams.

As stated in paragraph [0018], the absence of the MCU or MC further may tend to reduce communication latency because communicating directly among the conference participants, rather than through a central entity, may minimize the number of network “hops” required to collect, mix and redistribute the media streams.

The independent claim have been amended to recite that the participants communication “directly” with one another.

With regard to the rejection of claims 1-4, 10, 12-14, 17-19, and 21 as being anticipated by Biggs, this reference appears to be directed to the type of system described in Applicant’s Figure 1B as it requires a centralized device dubbed the “MultiMedia Serve” (MMS) 102 to coordinate exchanges between the various endpoints or participants in the conference. As recited in the abstract of Biggs “*The MMS is equipped to control the network such that multimedia signals may be exchanged among a plurality of endpoint devices, thereby providing a multimedia conference*”.

Embodiments of the present invention require no such MMS or other centralized device as taught by Briggs. In fact, embodiments of the claimed invention are directed to eliminating such a device.

With regard to the rejections of claims 25-27 and 29-30 as being unpatentable over U.S. Patent 6,731,609 to Hirni, this rejection is also traversed. Just as Biggs, described above, Hirni requires a centralized switch dubbed an "Automatic Call Distributor" (ACD) in order to setup and route calls in a teleconferencing environment. As shown for example in Hirni's Figure 3, all the endpoints in a teleconference must be routed through a centralized server 36. Again, Applicant's claims as presented eliminate the use of such a centralized server or other such device.

With regard to the rejections to claims 5-8, 11, 15-16, 20, and 22-24 base on the combination of Biggs and Hirni, these rejections are traversed for the reasons noted above. Both Biggs and Hirni require a centralized server or device to setup and route calls between participants in a teleconference. The present invention requires no such device.

With regard to the rejections to claim 9 as being unpatentable over Biggs in view of U.S. Patent 5,566,171 to Levinson, this rejection is traversed. The Examiner relies on Levinson for teaching a "fast connection procedure". Levinson appears to be directed to a multi-mode high speed network switch. While Levinson does appear to use the phrase "fast connection sequence", it does not teach or suggest a teleconferencing system where the endpoints

communicate directly thus eliminating the need for a centralized server or processing unit as claimed. Thus, since his feature is also lacking in Biggs, prima facie obviousness has not been shown.

With regard to the rejection of claim 28 as being unpatentable over Hirni in view of U.S. Patent 5,859,979 to Tung, this rejection is respectfully traversed. The examiner has relied on Tung for teaching “the reception and display of remote video signals in the remote video window”. However, even assuming arguendo that this dependent claim feature is taught by Tung, it does not cure the primary deficiencies as previously pointed out in Hirini to warrant a case of *prima facie* obviousness.

As amended, claim 1 now recites “A method for setting up a distributed multipoint conference among three or more endpoints without requiring centralized control either for signaling or for mixing media streams comprising: ...the third endpoint directly establishing a connection between itself the one or more other participating endpoints identified by the requesting endpoint, the third endpoint identifying the requesting endpoint to the one or more other participating endpoints” (emphasis added).

Independent claim 12 recites “A method of facilitating a multipoint conference among three or more endpoints, the method comprising: directly sending to each of the other participating endpoints identified by the requesting endpoint an invitation to establish a connection and information identifying the requesting endpoint” (emphasis added).

Independent claim 21 (and similarly claim 25) recites “directly receive from an requesting endpoint information comprising an invitation to establish a connection with the requesting endpoint and identifying one or more other endpoints participating in a conference with the requesting endpoint; directly establish a connection with the requesting endpoint; directly send to each of the other endpoints identified by the requesting endpoint an invitation to establish a connection and information identifying the requesting endpoint; directly receive from each of the other endpoints information establishing a connection; and mix a plurality of unicast streams received from the inviting and other endpoints to form a logical conference” (emphasis added).

The above features recited in the claims are not taught or suggested by the prior art of record. As such, it is respectfully requested that the outstanding rejections be withdrawn.

Application No. 09/896,521
Amendment dated December 20, 2004
Response to Office Action of September 23, 2004

Atty. Docket No. 042390.P11785
Examiner: Jude Jean Gilles
TC/A.U. 2143

In view of the foregoing, it requested that the application be
reconsidered, that claims 1-30 be allowed and that the application be passed to
issue. Please charge any shortages and credit any overcharges to Intel's
Deposit Account number 50-0221.

Respectfully submitted,

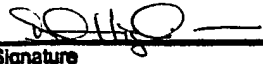
Date: December 20, 2004

/Kevin A. Reif # 36,381/

Kevin A. Reif
Reg. No. 36,381

INTEL
LF1-102
4050 Lafayette Center Drive
Chantilly, Virginia 20151
(703) 633-6834

I hereby certify that this correspondence is being deposited with
the United States Postal Service as first class mail with sufficient
postage in an envelope addressed to Commissioner for Patents,
P.O. Box 1100, Alexandria, VA 22313 on:

20 DECEMBER 2004
Date of Deposit
DEBORAH L. HIGHTON
Name of Person Mailing Correspondence

Signature 12-20-04
Date